

# ecology

- [Exovoviparans and Forest Flyers](#)
- [Butter Analog](#)
- [Part of a not-so-balanced Breakfast](#)
- [A Bit More on Tree Dwellers](#)
- [The Bobtailed Hob](#)
- [Wind Fruit Picture](#)
- [I Choose You... For Dinner!](#)
- [Steadtree Fruit](#)
- [Addendum](#)
- [Tidying up Yih's Biosphere](#)
- [Giant Enemy Crab](#)
- [Tree Dwellers](#)
- [Forest Flyer Musings](#)
- [Redfruit Image](#)
- [Hexapoda and tetrapoda](#)
- [3D Steadtrees Fruit](#)

# Exovoviviparans and Forest Flyers

Exovoviviparans are a clade of animals roughly as broad as Earth mammals. They're known for reproducing via womb nests, hence the name. They also bear fur, although they're not the only animals to do so. Yinrih and tree dwellers are members of this clade.

Other exemplars are forest flyers (small flying animals that look like a cross between a bat and a colugo). These were one of the first animals domesticated by the yinrih, being favored for eating pests. In modern times they're kept as house pets, occupying a similar cultural niche as cats do for humans. The Commonthroat word for forest flyer <smPrg> /yip, long rising strong grunt, chuff, short low weak growl/ can also mean a person who appears clever without actually being clever.

# Butter Analog

The word <slmg> /yip, short low strengthening grunt, short low weak growl/ refers to any number of edible plant products in the form of a cream or spreadable paste.

The substance fills a role similar to cheese or butter, and the natural flavor can range from savory to sweet. Humans find the unmodified product satisfyingly flavorful, but yinrih use it mostly for its texture, as a base to add other flavors to, or as a binder.

The word also appears in the profane expression <slmqNLqN!> literally "[that's] cloaca butter!" meaning nonsense.

# Part of a not-so-balanced Breakfast

Tree dweller childermoots consume the remains of the womb-nest after their kits hatch.

# A Bit More on Tree Dwellers

Image

Tree dwellers are capable of using simple tools. They will get at the meat of hard-shelled fruits by holding the fruit in their rear paws like a vise and cracking the shell with a rock. They've also been seen using sticks to swat at misbehaving pups.

On a somewhat related note, while I've detailed the two members of the genus *Vulpithecus*, there are likely higher taxa of vulpithicids and vulpithecoids with extant members. They may be more vulpes than pithecus or more pithecus than vulpes.

# The Bobtailed Hob

The bobtailed hob, bob hob, or just hob, is a vulpithecoid comparable in intelligence to a baboon. It is also roughly equal in evolutionary distance from the yinrih as baboons are from humans. The name is a human designation that refers to hobgoblins, but even more to Thomas Hobbes, as these creatures are nasty, brutish, and short.

It is fully bipedal, with feet optimized for a cursorial lifestyle. The feet are digitigrade, retaining the yinrih's paw pads and claws but with much shorter toes, of which it has only four compared to the yinrih's six. The structures homologous to the yinrih's inner and outer thumbs have become sharp dewclaws.

Its hands have similarly become more specialized for grasping. There is no writing claw, the fingers are tipped with flat primate-like nails, and while the hob retains a well-developed opposable inner thumb, the outer thumb has atrophied and its claw has become a sharp knife-like spur positioned somewhat further up the arm. The palms of the hands lack pads.

As its name suggests, it does have a tail, but a rather stumpy one. Its face is much flatter, with reduced whiskers but retaining a wet rhinarium. There is a prominent marking above the eyes that give the impression that the hob has a unibrow. The eyes have only one set of crimson-colored bandpass membranes that are fused shut, though like the yinrih the hob also has a set of "normal" primary eyelids.

Hobs can be found in a particularly volcanically active region similar to Yellowstone, although with much more frequent and less volatile eruptions. The area goes through cycles of eruption followed by repopulation by grasses and herbivores. The frequent eruptions have dotted the area with easily accessible surface deposits of obsidian. Hobs use obsidian shards as stabbing weapons. They lack the intelligence to make tools of their own, and rely on scavenging naturally occurring sharp flakes. Their tool use is instinctual rather than learned, like an otter using a rock to crack a shell.

They are quick pursuit predators similar to cheetahs, chasing down their prey and dispatching it with rapid stabs to large arteries. Curiously, they emit a high pitched, almost tuneful cry immediately prior to giving chase. It is thought that the cry is used to goad their prey into running. This cry is so recognizable and standardized that it has become a kind of leitmotif for the animal. They drink no water, getting all their necessary liquids from the blood of their kills, which they almost fully exsanguinate.

While the large knife-like spurs on their arms can be used as a weapon when in want of obsidian, it is more relevant as a display structure to attract mates, with sharpness being preferred over length. Hobs are strongly r-selecting, with a very small childermoot (usually a single male-female pair) producing a great many offspring which they abandon soon after weaning. Unlike yinrih, they are iteroparous and relatively short-lived.

Bob hobs are associated with fire in yinrih culture, similar to Salamanders on Earth. Legends say

that their heads catch fire when angry, and their fused red bandpass membranes give the impression that they have glowing fiery eyes. Their prodigious quickness has also made them the byword for speed, much like Terran cheetahs. The hob's affinity for sharp objects is also frequently referenced.

# Wind Fruit Picture

Here's a wind fruit rendered in Blender.

Image

# I Choose You... For Dinner!

There is an entire clade of small creatures filling rodent-like niches that have evolved the ability to store an electric charge in capacitor-like organs below their eyes. They can discharge these organs into any would-be predator attempting to eat them. These critters are called `sdFrdFg`, which (very loosely) translates to "zap rats". Zap rats have even developed aposematic coloration, bearing mostly bright yellow fur with white, black, red, or blue accents being present in varying degrees depending on species. Unfortunately for the zap rats, the yinrih LOVE the mild shock they get from eating them. It's like sticking a 9-volt battery on your tongue. They're either eaten live or, if you don't want to risk them going off in your gut instead of your mouth, you can quickly kill them by holding the animal between your inner and outer thumb and puncturing their dorsal nerve cord with your writing claw.

There are frequent population booms, necessitating regular cullings, with hunting being the preferred method. The zap rats' bright yellow fur makes them trivial to spot.

# Steadtree Fruit

## Image

This is the fruit of the steadtree, a species of tree native to the equatorial rain forest on Yih. It is this tree that the yinrih evolved to dwell in, and this fruit co-evolved alongside the yinrih's nonsapient ancestors in order to use the yinrih as seed dispersers. It's about the size of an apple, and its flavor is uniquely adapted to the yinrih's poor sense of taste. It is mildly sweet but has a very, very strong sour flavor. Humans liken it to Warhead candies. The skin is deep bluish purple with a vivid violet sheen, and its flesh is an extremely saturated shade of blue.

The fruit plays an important part in the Bright Way. While it isn't used in the liturgy itself, it is distributed afterward to visitors, irrespective of creed, in a manner similar to [Antidoron](#).

Other parts of the steadtree are used in various rites. In particular, the large, broad leaves are used for recording scripture. One of a cleric's duties during her formation is to copy scriptural passages onto steadtree leaves using her own ink. These leaves were the object of the yinrih's scent marking behavior, and thus ultimately their first writing medium.

Young branches are distributed to the faithful during the liturgy celebrating the kindling of the Fire of Understanding. They're supposed to serve as a reminder of the yinrih's origins, but they're as often as not wielded by pups as instruments of annoyance against their litter mates.

# Addendum

“[Glenn](#) wrote: 2024-11-11T14:41:44+00:00 Indeed! An interesting and creative (if slightly disturbing) alternative form of parental feeding of their young.

An addendum:

Wormcows are regarded much like Terran cattle--placid, slow-moving herd animals that aren't too bright. Their sheer girth is both a blessing and a curse, as it attracts predators but also serves as their best means of defense. Wormcows rear up and slam back down on whatever is trying to nom on them, or try to roll over and crush the attacker under their weight. Predators that target wormcows tend to go for the dads' trophic legs, so encounters with carnivores don't typically result in the wormcow's death. Presapient yinrih shires living on the boundary between the jungle and southern steppes preyed on wormcows, and the animals became one of the first (after forest flyers) to be domesticated upon the yinrih's ascent to sapience.

Domestic wormcows were selectively bred to regard their yinrih masters as calves, so they'll happily relinquish their trophic limbs. After First Contact, Christian missionaries at Focus adapt the wormcow as a rough equivalent to both the sheep and the pelican, as symbol of self-sacrifice.

# Tidying up Yih's Biosphere

Okie-dokie, I want to tidy up Yih's biosphere.

For starters, Yih life is not DNA-based, but it is based on a similar nucleic acid that encodes the same proteins. This creates a genetic firewall between Earth life and Yih life. This hopefully doesn't mean that Yih organisms can't metabolize Earth biomass.

Off the top of my head, here are the critters I've mentioned so far, whether alluded to indirectly or meticulously detailed, arranged into rough clades. I may refer to these biota by a close Terran equivalent, and you can go ahead and append "analog" or prepend "xeno-" or "pseudo-" to these names, since they aren't at all related to Terran lifeforms. My goal is to strike a balance between alienness and familiarity, erring on the side of the familiar both to make my job easier and to make the yinrih and their environment more relatable.

Code: [Select all](#)

```
* animals
  * exovoviviparans (give birth via womb nests, sweat milk from the forepaws, bear fur, six or fewer digits)
    - Zap Rats (small, use electric shock as weapon)
    - Forest Flyers (flight)
  * Vulpithecoids (tool use)
    - Bobtail Hob (cursorial, pursuit predator, iteroparous, bipedal)
  * Vulpithicids
    * Vulpithicins (arboreal, long-lived, semelparous, social)
      - yinrih (sapient)
      - tree dwellers
    - Wormcows (give live birth, iteroparous, trophic limbs)
    - The critter that Firefly is named after (bioluminescence, flight, insectoid)
* plants (photosynthetic)
  - grasses eaten by wormcows and other grazers
  * woody plants
    - Steadtrees
    - Wind fruit bush
    - poisonous redfruit tree
    - nonpoisonous redfruit tree
  - Whatever the minty yellow fruit comes from
  - Whatever is used to make cream/butter (whence the phrase "cloaca butter")
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\* Fungus (heterotrophic)

- whatever is used to make lease meat

\* Pathogenic microbes

- Whatever caused the plague that killed Stormlight's parents and litter mates.

# Giant Enemy Crab

Tales of giant sea monsters are ubiquitous throughout human culture. The same is true at Focus. Yih's nautical folklore survived the yinrih's leap to the stars and has thrived among the salty-pelted sailors that call the surface of Sweetwater home.

The most famous legend regards a giant *FrkrGHg* "armorback", a broad term that encompasses several arthropod-like, and particularly crab-like, benthic creatures. A typical armorback body plan looks like a cross between a crab and a centipede, with a crab's head and pincers on a long, segmented body. Real armorbacks don't get much larger than a lobster, but this legendary critter is said to be so large that it can thrust its head above the surface while its rear is planted on the seabed.

Its favorite meal is, what else, hapless seafarers. It is often blamed, with varying degrees of seriousness, for the sinking of submarines. Most legends say that its chitinous armor is completely invulnerable, but that it can be dispatched easily enough if you can manage to flip it on its back to expose a weak point on its ventral side.

# Tree Dwellers

Tree Dwellers (Commonthroat <qgKq-dq-g> /huff, early rising strengthening growl, huff, short high weak whine, huff, short low weak growl/ literally "forest yinrih") are a non-sapient species closely related to the yinrih. While humans often compare them to chimps, they're more closely related to the yinrih than chimps are to humans. It's better to think of them like early hominins. They're clever, can use simple tools, and have complex hierarchical social structures, but do not conduct rituals or possess language, which are the criteria the yinrih use to determine whether something is a sophont.

The Tree Dwellers and yinrih evolved from a single population of animals that lived in an equatorial rain forest river basin. Over time, the river widened, isolating the two populations. The northern population became the tree dwellers while the southern population became the yinrih. Both species are arboreal, but can also navigate on the ground well enough. The basin floods annually, and both species would spend the dry season on the ground and in trees, while remaining in the trees during the wet season.

To humans they look very similar to the yinrih. Their vocalizations even sound like yinrih speech, at least if you don't know Commonthroat or some other yinrih language. The only obvious visual difference is that Tree dwellers have more rounded ears (think the ears of a corgi vs the ears of a wolf or a German shepherd). Yinrih can smell the difference pretty easily, as well as spot other subtle visual cues in how they look and move.

The Tree Dwellers are similar enough to the yinrih that they're used for organ transplants and lab testing. In fact, before yinrih zoology was well developed, the yinrih considered themselves to be literally sapient tree dwellers, with the only difference being that yinrih had rational souls and tree dwellers had animal souls. A (relatively minor) religious controversy arises when it's discovered that they are in fact different species.

The yinrih are more comfortable with their animal origins compared to humans. Since they evolved a written language, their history reaches back to the dawn of sapience in their species. The highest holy day for the Bright Way (before First Contact) is the feast of the kindling of the Fire of Understanding, which celebrates the emergence of sapience. Discovering evolution and genetics (other than the above-mentioned minor issue) is not seen as an impediment to faith. The yinrih knew all along they came from other animals, they just didn't know by what mechanism. This causes some friction with more pious humans. The yinrih don't understand why some humans could be uncomfortable with our status as great apes, but once the cultural particulars are explained, they are more sympathetic, even if they disagree. They may even refer to humans as apes, matter-of-factly or even out of affection, but never out of scorn or ridicule, which is only fair, seeing as how we often call them monkey foxes ourselves.

Wealthy yinrih may attempt to keep tree dwellers as pets. They're pretty cute as pups, but become aggressive when they mature. While they don't have the pound-for-pound strength advantage over yinrih that chimps have over humans, they're still more than capable of messing you up.

There's an urban legend that a group of Partisan scientists tried to teach a tree-dweller the concept of mortality. The outcome differs depending on who's telling the story.

# Forest Flyer Musings

I haven't really given much thought to what forest flyers actually look like. Considering they're likely the most common house pet among yinrih I think I ought to change that.

I describe them as having many of the same cultural associations as cats, so subconsciously I've pictured them as cats, perhaps with a potagium for gliding.

Another possibility that occurred to me today is that there may be two separate clades of terrestrial vertebrates, one with four limbs and one with six. These hexapods could potentially evolve wings from the middle pair of legs. Perhaps the hexapods and tetrapods emerged from the oceans at different times, or perhaps the tetrapods evolved from the hexapods.

Perhaps wormcows are part of this hexapod clade.

# Redfruit Image

## Image

Heres a redfruit (CT qfBqg /huff, early falling weakening whine, huff, short low weak growl/). As with many other words referring to fruits, this word also doubles as a color term.

There are two species of tree that bear nearly identical fruits. One is a delicious treat designed to induce seed disperses (including yinrih and their tree dweller cousins). The other is extremely poisonous, killing small animals with a single bite and larger animals in just about enough time it takes to eat the fruit. It kills so quickly because the tree needs the resulting corpses to fall to the ground and decompose, providing the tree with nutrients. The insidious part is that the poison is nonvolatile meaning it can't be detected by the yinrih's keen sense of smell.

On Yih and secondarily throughout the Allied Worlds, the color was first associated with risk, as you didn't know when you bit into a redfruit whether it was safe or not. Over time, risk morphed into bad luck, and that's why yinrih with red fur are considered unlucky.

# Hexapoda and tetrapoda

One idea for the evolution of land animals: There are two clades of terrestrial vertebrates: the hexapoda and tetrapoda, distinguished by the number of legs. Most Yih fish have six lobe fins, suggesting that the hexapods derived from fish first. There are few or no four finned fish, suggesting that tetrapods evolved from the already land-dwelling hexapods.

There are two theories regarding the emergence of the two clades on land. The first theory says that they derive from two separate instances of fish adapting to terrestrial life (see IRL mudskippers, walking catfish, etc). The other states that there was only one such instance. The hexapods emerged first, some of them returned to the water, lost the middle pair of legs, then re-landed.

Wormcows are members of the hexapod clade, showing that evolving more legs (or having them bred in) isn't out of the question.

# 3D Steadtrees Fruit

Image

Here's a low-poly steadtree fruit. I'm probably going to keep improving on this one since it's already so close to how it looks in my head. I'm particularly surprised I was able to get the violet sheen on the skin.